

TEXAMAUOPS, A NEW GENUS OF PSELAPHIDS
FROM CAVES IN CENTRAL TEXAS
(COLEOPTERA: PSELAPHIDAE)

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The cavernicolous pselaphids of the United States are represented by several species of *Batrisodes* and *Batriasymmodes* (Batrisini, Batrisina), by a few species of *Bythinopsis* and *Machaerites* (Bythinini), by the remarkable *Speleobama vana* (Speleobamini), and by three species of *Arianops* (Batrisini, Amauropsina) (Park, 1960). Even with the *Arianops*, known from single collections from one cave each in Alabama, Tennessee, and Virginia, the known American cave fauna apparently does not equal the European cave fauna (cf. Jeannel, 1943, 1950) in the proliferation of cave amauropsines. The discovery of the amauropsine genus described in the present paper is thus of special biospeleological interest. Its presence in Texas, from which only one species of cave pselaphid has been described (*Batrisodes schneiderensis* Park, 1960), is also noteworthy. The rich fauna of the numerous caves along the Balcones fault zone in central Texas is still poorly known. In addition to a few undescribed *Batrisodes*, the cave beetle fauna of this region includes several troglobitic species of the carabid subgenus *Rhadine* (Barr, 1960) and occasional troglophilic species of *Tachys* (Carabidae) and Ptomaphagus (Catopidae).

Texamauops Barr and Steeves, NEW GENUS

Batrisini having the following combination of structural features. Eyes absent, their site represented by a rounded knob. Vertexal foveae well developed, perforate. Antennae 11-segmented, simple. Maxillary palpi 4-segmented, simple; first segment minute; second segment slender and pedunculate; third segment as wide as apex of second segment, $\frac{1}{4}$ longer than wide; fourth (distal) segment $1\frac{2}{3}$ times the length of second segment, acute-subfusiform, widest at middle, bearing a minute palpal cone. Pronotum truncate-oboval with 3 perforate, antebasal foveae. Prosternum without a median carina; mesosternum with median and lateral foveae; metasternum with a deep, antebasal, median impression. Elytron with 2 distinct, perforate sub-basal foveae and a single, perforate, subhumeral fovea on flank; sutural stria entire; metathoracic wings absent. Five tergites visible, the first only slightly longer than second; marginal carinae incomplete; seven sternites visible in female, the first very short and the sixth the longest. Legs with brachysceline articulation, trochanters short and femora obliquely placed so that femur and coxa are subcontiguous. Tarsi 3-segmented, first segment very short and last 2 segments relatively long; protarsi with second and third segments subequal, meso- and metatarsi with second segment longer than third; third segments with single claw and minute accessory seta.

Type-species: *Texamauops reddelli* Barr and Steeves, new species.

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The amauropsines of the United States may be distinguished as follows:

1. Elytron simple, without foveae at base or flank; eastern United States----- (ARIANOPS) 2
Elytron with 2 sub-basal, perforate foveae and a single, subhumeral, perforate
fovea on flank; known only from Texas----- TEXAMAUROPS new genus
2. Pronotum with a distinct, median fovea near the base; endogenous in Appalachian
Mountains ----- Subgenus ARIANOPS s. str. Brendel 1893
Pronotum without a median fovea, with or without small, lateral, sub-basal foveae;
caves of Virginia, Tennessee, and Alabama----- Subgenus ARISPELEOPS Park 1951

From European amauropsines, *Texamaurops* is most conspicuously differentiated by the elytral foveae and the comparatively shorter first visible abdominal tergite. In the elongation of the appendages, *Texamaurops* resembles the troglobitic species of *Amaurops* (*Troglamaurops*) which inhabit caves north and east of the Adriatic Sea.

Texamaurops reddelli Barr and Steeves, NEW SPECIES

(FIG. 1)

Type: Female (Chicago Museum of Natural History), total length 2.72 mm., head 0.63 mm. long \times 0.54 mm. wide, pronotum 0.57 mm. long \times 0.56 mm. wide, elytra 0.83 mm. long \times 0.83 mm. combined width, abdomen 0.86 mm. long \times 0.66 mm. wide, antenna 1.80 mm. long, metafemur 1.25 mm. long.

Color reddish-brown, shining; pubescence pale, moderately abundant and semi-appressed; general body surface sparsely and weakly punctulate.

Head 6/7 as wide as long (width measured across the ocular knobs and length measured from anterior clypeal margin to occiput); eyes absent, replaced on each side by a short, blunt, tuberculate knob; vertexal foveae prominent, perforate, separated by a well-developed median vertexal carina which extends from the cervicum to just anterior of the level of the vertexal foveae; interfoveal sulcoid impression arcuate and extending anteriorly to the level of the ocular knobs; lateral vertexal carinae as well-developed as median carina, their anterior termini slightly anterior to that of median carina; declivity of face simple and shallowly concave; clypeal margin bluntly rounded; labral margin broadly concave; mandibles strong, left crossed dorsal to right; maxillary palpi as described for the genus; genae and ocular field rugose-tuberculate dorsad to the lateral vertexal carinae; genal beard conspicuous and well-developed; ventral surface of head heavily pubescent and rather coarsely punctulate, with a feeble but distinct mid-gular carina and a deep median basal fovea.

Antennae 11-segmented, simple; scape crescentic and thickened; II-VII elongate, VIII shorter than VII or IX; club feebly developed except XI, which is conspicuously enlarged, longer than IX and X together, with a pedunculate base and narrowly rounded apex. Segments in length ratio as follows, beginning with the scape: 11:8:11:12:14:12:12:9:12:13:30.

Pronotum oboval with subtruncate apex and base, as long as wide and approximately 1/10 shorter than head; widest at the middle; disc with the following sculptural features: (1) a deep, imperforate median fovea and a deep, perforate lateral fovea on each side, all three foveae at basal 1/4; (2) broad, shallow grooves extending anteriorly from the lateral foveae, delimiting a median, domed field on the disc; (3) posterolateral to the median fovea there is on each side a short, acute spine, from which a feebly raised, tuberculate ridge extends forward to the middle of the disc; (4) a low median carina extending from the median fovea to the base; (5) a small fovea on each side near the base, and one or two minute, punctiform foveae medial to these; (6) a longitudinal median sulcus from median fovea almost attaining apical margin.

Elytra with combined width equal to median length and $1 \frac{4}{9}$ as long as pronotum; humeri unarmed, long and sloping; two conspicuous, perforate foveae at the inner base of each elytron; sutural stria entire; no discal impressions; disc with long, semiappressed, sparsely distributed pubescence; disc microsculpture finely reticulo-

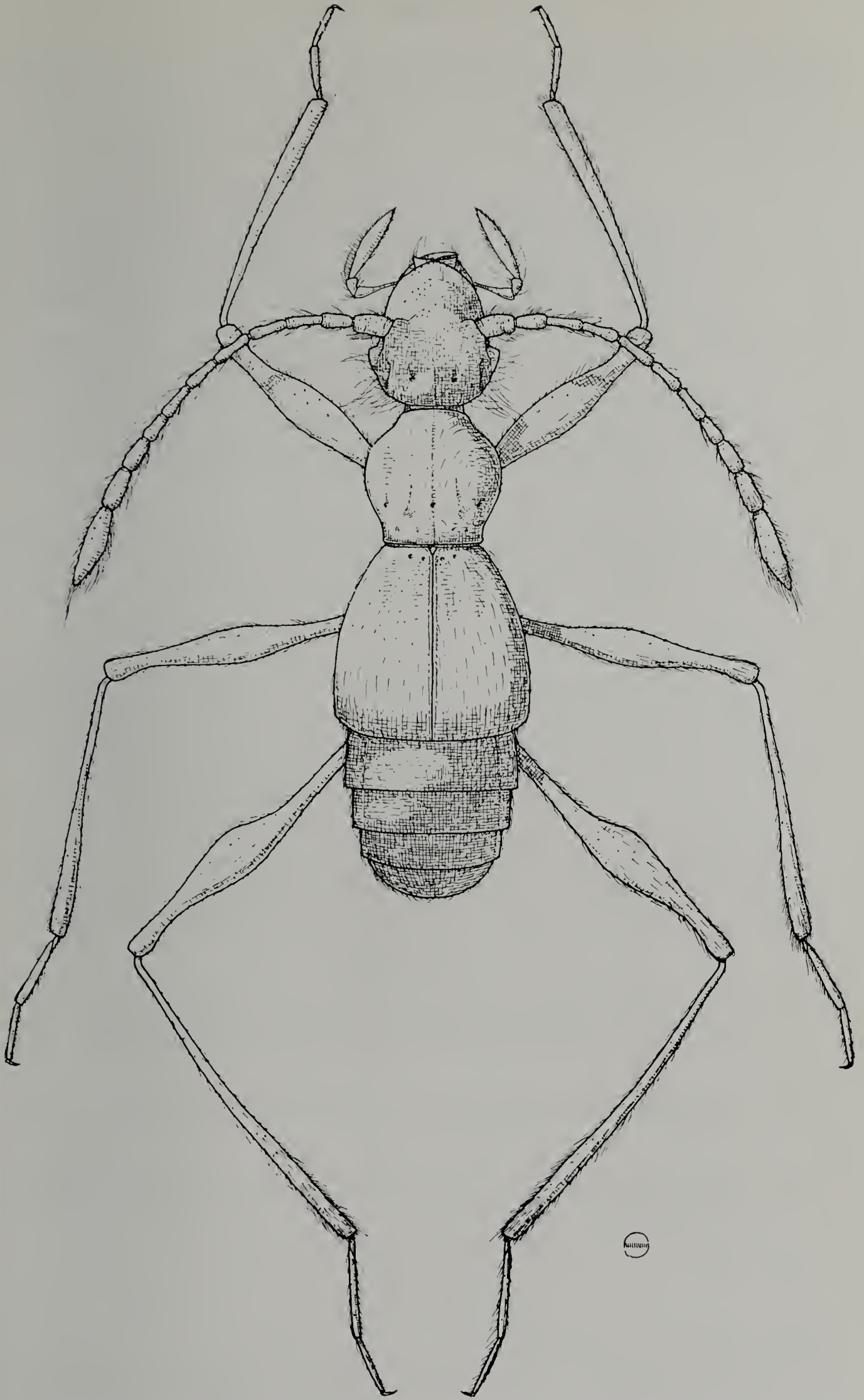


FIGURE 1—*Texamaurops reddelli*, new genus and species. Holotype female, Kretschmarr Cave, Texas.

punctulate; flank with a single, perforate subhumeral fovea and an impressed line parallel to the lateral margin. Metathoracic wings absent.

Abdomen with five visible tergites in median length ratio 6:5:3:5:3; first tergite with marginal carina in basal $2/3$; tergites 1-4 with a finely raised external stria on each side; external stria of first tergite parallel to margin (from which it is apically separated by about $1/17$ the width of the tergite) in apical $1/3$, then medially divergent, entire; fourth tergite with a vestigial marginal carina very close to the base of the external stria. Seven visible sternites in median length ratios of 1:3:2:2:2:5:3; fifth sternite with a lateral, arcuate, submarginal sulcus delimiting the ventral margin of an elongate, triangular sclerite which is dorsally bounded by the vestigial marginal carina and the external stria of the fourth tergite; sixth sternite with simple posterior margin.

Prosternum without a median carina but with a deep antecoxal fovea on each side and with a blunt ridge extending from the lateral margin of each coxal cavity anterodorsally to the apical margin of the prosternum. Mesosternum with prepectoid area strongly alutaceous, with a deep median fovea and a deep lateral fovea on either side; mesocoxal cavities confluent. Metasternum strongly convex, with a deep, V-shaped median impression at the base and a small fovea near the posterior margin of each mesocoxal cavity.

Legs very long and slender, simple, femora spindle-shaped; pro- and metafemora widest at the middle, mesofemora widest at about basal $3/5$; metafemur a little more than half the total body length; tarsi 3-segmented, first segment small, distal two elongate, second as long as third in protarsi, longer than third in meso- and metatarsi; third segments with a tarsal claw and minute accessory seta.

Male unknown.

Described from a single female, the type, deposited in the Chicago Museum of Natural History. This specimen was collected by James R. Reddell and David McKenzie in Kretschmarr Cave, 15 miles northwest of Austin, Travis Co., Texas, on March 2, 1963. It was found under a rock in the second room of the cave, about 30 feet from the entrance.

A second female, collected in Coffin Cave, 10 miles northwest of Georgetown, Williamson Co., Texas, on Nov. 3, 1963, by James R. Reddell, is apparently conspecific with the holotype, but we have not made it a paratype. It was "found several hundred feet from the entrance crawling among small rocks," according to Reddell, in a personal communication.

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BEETLE TALK

Agustine Carmenes, Av. Cral. Flores 991, Las Piedras (Dpto. Canelones), Uruguay, would like to exchange specimens of Coleoptera.

Is Orlando Park getting ready to revise the Pselaphidae of Baker Street? He has just published a book called, "Sherlock Holmes, Esq. and John H. Watson, M.D.: An Encyclopaedia of Their Affairs."